Kettering University

Kettering University Tackles BYOD and Density with Robust Wireless from Aerohive

"Aerohive has been amazing, from a knockout wireless solution, to the instrumental and amazing support they have provided our team at Kettering University. Even with large events like our robotics competitions, we have yet to choke any access points, the solution has just been flawless. Aerohive delivers what they promise."

— **Dale Karbinsky**
Senior Network Engineer &
Senior IT Project Manager
Kettering University

About Kettering University

Located in Flint, Michigan, Kettering University has a long history and was formed out of the vision of a group of Flint leaders wanting to transform the automobile industry. It was formed in 1919 as The School of Automobile Trades, then renamed in 1923 to The Flint Institute of Technology. In 1926, General Motors took over financial support of the university and it was renamed General Motors Institute, until 1982 when GM divested itself of ownership. The university changed its name in 1998 to honor Charles Kettering who helped found the institution, as well as being a key pioneer of the concept of professional cooperative education.

Today, the university enrolls approximately 3,000 students and provides a private cooperative-based learning environment. Kettering offers 14 undergraduate and five graduate degrees in engineering, science, mathematics and business to educate global leaders of industry.

The Challenge

Kettering University had its first foray into the wireless world 10 years ago, when it was approached by HP and tried out a few access points. At that time, the university chose to deploy a wider Cisco solution to set up wireless access in limited areas of its campus. As the demands for Wi-Fi grew in the last five years, Kettering needed to take a broader look at its wireless requirements. The wireless network was becoming mission-critical and struggling to accommodate the rapidly expanding number of users and devices, and to reduce costs Kettering needed to move away from the controller model.

After conducting a site survey, Kettering evaluated numerous providers including Aruba, Extreme, Ruckus and Xirrus with a plan to cover its entire campus and plan for future scalability and density. BYOD was becoming more complex and expanding the Cisco solution was cost prohibitive. Kettering also wanted to segment its network easily into separate SSIDs to separate users and devices and to better control bandwidth and connectivity.

The Solution

After the University identified funding, the IT team recommended Aerohive for comprehensive distributed wireless, which over the last three years has continued to evolve and expand.

With older residence halls and dorms, built in the 60s of practically all cement materials, the University chose to deploy Wi-Fi in lounge and common areas only. Across the rest of the campus, Kettering chose AP330 and AP350 access points, with HiveManager on premises for network management. The university established three separate SSIDs, segmenting employees, students and guests. A majority of users and devices connect to the guest network, with students only accessing local servers and giving IT the ability to throttle the connection.

Changes are visible across campus since deploying robust, enterprise-class Wi-Fi. Students access cloud applications with Citrix Receiver to access the KUCloud, the virtual computer lab. Laptops are used in classrooms to project presentations and cafeterias have digital wireless menu displays. Universities are places with heavy users of video streaming and apps such as YouTube, and Kettering has not experienced any connectivity hurdles and now has visibility into network use that it never had previously.

In addition, the University is home to the FIRST Robotics District competitions, hosted over several days with thousands of participants and attendees experiencing flawless Wi-Fi connectivity. For future wireless operations, Kettering is looking at RFID solutions for inventory management across its campus.

Why Aerohive?

- Distributed cloud-based model eliminated cost barriers
- Flexible network management system with visibility and control
- User-friendly interface takes networking management to next level
- Robust technology able to handle density, even during large events

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